

GSA ORDER

SUBJECT: PBS design review procedures for the nationwide design and construction program

1. Purpose. This order clarifies and supersedes existing procedures for Public Buildings Service (PBS) design review.

2. Cancellation. Instructional letter PBS-IL-89-7 is canceled.

3. Background. The major goal of the PBS nationwide design and construction program is to produce projects that are of high quality, cost effective, and completed on schedule. Design review is an essential part of the process to achieve this goal. These reviews provide an opportunity for decision-making and dialogue between GSA, as the prudent and knowledgeable owner, and the architect/engineer (A/E) or contractor responsible for the design.

4. GSA requirements and responsibilities. As the owner/developer, GSA has specific requirements related to the management, operation, maintenance, functionality, and appearance of its facilities. Also, as a designated Federal construction agency, GSA is responsible for establishing and enforcing technical procedures and public safety standards on Federal property under its control. Federal law requires that GSA adhere to recognized national standards and model building codes to the maximum extent practicable. In this regard, GSA is the owner/developer of real estate and serves as a "local or municipal" building department for its own facilities. The objectives of these PBS design review procedures are as follows:

- a. To ensure that the Government receives services in accordance with defined contractual requirements and budget limitations, and at an acceptable level of performance.
- b. To ensure that GSA project designs comply with Federal laws and established standards and codes.
- c. To minimize construction changes, claims, and cost overruns.
- d. To avoid negating the A/E's or contractor's responsibilities and associated liabilities for its work.
- e. To challenge the professional and creative skills of private sector designers to produce design excellence for GSA.

5. Procedures. The attached design review procedures emphasize contract designers' professional responsibilities and liabilities for their products, and GSA's responsibilities as the client owner and Federal construction agency.

- a. Private sector A/E's and contractors are expected to provide the highest level of technically accurate products and services.
- b. Approvals of designs must be based on an appropriate level of design review to ensure that, as the owner, GSA's standards and code requirements have been satisfied.

c. Assistant Regional Administrators for PBS will ensure that the owner's perspective is represented, and that regulations are enforced during the design development process. Each regional division or staff office (Facility Planning, Buildings Management, Security and Law Enforcement, Real Estate, Design and Construction, etc.) that has either program or regulatory responsibilities for projects must have an active and accountable role during the project development process.

6. Action. Regions are expected to immediately implement PBS design review procedures. The Office of Real Property Development will evaluate progress on the procedures' implementation as part of the PBS Regional Management Survey Program. The key to the success of these procedures will be:

- a. The regions' selection of high quality A/E's, contractors, and/or developers to produce GSA designs.
- b. The regions' insistence on high-quality professional performance by their design, construction, and/or management consultants and contractors, and rejection of anything not in compliance with GSA requirements. The regions must also enforce GSA procedures regarding design deficiency liability where appropriate.
- c. The development of high-quality and comprehensive project development studies, programming documents, or other procurement documents that specifically set out the objectives, requirements, and standards for each project.

WILLIAM C. COLEMAN
Commissioner
Public Buildings Service

ATTACHMENT

PROCEDURES FOR PBS DESIGN REVIEW

1. Definitions.

- a. Standards. Rules or models establishing the level of performance required.
- b. Codes. Externally generated minimum standards or regulations set by law or established by Federal and/or State and local government(s).
- c. Criteria. Internally established standards or requirements based on GSA's, as the owner's, operational, functional, managerial, etc., needs (above or in addition to code requirements).
- d. Quality (project). The degree of success in achieving project objectives and the degree to which the design conforms to PBS design criteria and technical policies.

2. Types of review. During project execution, the regional Design and Construction Division is responsible for coordinating and facilitating requisite internal GSA and client agency reviews and approvals. The designated project manager or individual responsible for project execution shall ensure that project quality objectives, scope, and associated cost estimates have been achieved in accordance with approved prospectus and contract content, and schedule requirements, as a basis for approvals and

associated progress payments to the contractor. The following reviews will be used as a basis for such determinations.

a. Design quality review. Design quality reviews are project reviews of a "programmatic" and technical nature to ensure that the owner's and tenants' interests, stated objectives, and perspectives are represented in the design. These interests include functionality, economics, operational requirements, visual appearance, and image. Most objectives and owner interests are stated in prospectus development studies, design programming documents, and project scopes of work. PBS criteria are included in GSA orders, handbooks, and manuals. All regional divisions and staff offices that have program responsibility for projects participate in design quality reviews. The architectural and engineering technical aspects of these reviews are primarily accomplished by the regional Design and Construction Divisions. Client agency positions and comments regarding the design should be incorporated into the review. Regions should encourage clients to participate in review meetings when appropriate. Design quality review should provide an opportunity for regions to challenge the A/E to achieve excellence and maximum responsiveness to GSA criteria and value engineering objectives. The review provides a framework for dialogue and decision-making.

b. Code review.

(1) Code review is a technical review to ensure that designs are in compliance with established Federal laws, designated building codes, and standards regarding public safety, environmental, and other public welfare requirements. These requirements focus on fire safety, accessibility, historic structures, energy, seismic safety, hazardous materials, structural, air quality, and environmental issues included in the following:

- (a) GSA Order, Compliance with Nationally Recognized Building Codes (ADM 3400.1).
- (b) Pub. L. 100-678, November 17, 1988 - Public Buildings Amendments of 1988.
- (c) Pub. L. 90-480, August 12, 1968 - Architectural Barriers Act of 1968.
- (d) Pub. L. 89-665, October 15, 1966 - National Historic Preservation Act of 1966.
- (e) Pub. L. 91-190, January 1, 1970 - National Environmental Policy Act of 1969.
- (f) Pub. L. 94-541, October 18, 1976 - Public Buildings Cooperative Use Act of 1976, and amendments to Architectural Barriers Act of 1968.
- (g) Pub. L. 95-619, November 9, 1978 - National Energy Conservation Policy Act.
- (h) Pub. L. 100-615, November 5, 1988 - Federal Energy Management Improvement Act.
- (i) Pub. L. 95-124, October 7, 1977 - Earthquake Hazards Reduction Act of 1977.
- (j) 41 CFR, Chapter 101, Federal Property Management Regulations.
- (k) 10 CFR, Part 436, Federal Energy Management and Planning Programs.
- (l) Executive Order 12003, July 20, 1977 - Relating to Energy Policy and Conservation.

(m) Executive Order 11593, May 13, 1971 - Protection and Enhancement of the Cultural Environment.

(n) GSA Handbook, Facilities Standards for the Public Buildings Service (PBS P 3430.1A). (This handbook includes GSA "building code" requirements.)

(2) Code review is accomplished by responsible individuals in PBS program offices that have regulatory responsibilities, such as Design and Construction Divisions, Safety and Environmental Management Branches, Historic Preservation staffs, etc. This review would be comparable to that required to receive a building permit from a local municipal government authority. In such local jurisdictions, code compliance review is normally performed by government employees. It may, as necessary, be contracted out. In the case of GSA, where regulatory authority and project management responsibility must coexist in one organization, a system of checks and balances is essential to maintain the integrity and independence of code compliance review. When code review and inspection are performed in-house, those individuals should be administratively under the direction of a Design and Construction Branch or unit not responsible for the project management or A/E operations for that project. The same would hold true for contractor support for code review, when that is necessary. This will reasonably ensure that GSA code compliance review is comparable to that provided on non-Federal projects. This review must be obtained by the GSA project manager or coordinator prior to approval of the final plans and specifications.

c. Constructability review. Constructability reviews are performed during the working drawing phase to ensure that the project has been fully coordinated, and the resultant project can be built as drawn, effectively marketed, and will result in minimum change orders. Construction management consultants can provide constructability reviews as part of their project management services to GSA. Regarding design/build projects, the constructability review is intended to provide opportunities for the construction management consultant and/or construction inspectors to identify potential problem areas that may impact the project schedule during construction.

3. Milestones. Design reviews should occur primarily at established milestones in project development as described below. Regions should apply the appropriate level of design review to reasonably ensure that GSA's criteria and established code requirements have been satisfied by the design. New construction and total space renovation projects (prospectus level) would require the most comprehensive reviews. These projects may require intermediate review meetings with the A/E due to project complexity, scale of investment, and owner exposure to risk. Other projects do not require the same level of effort. However, at the minimum, they must be reviewed for criteria and code compliance. It is important to emphasize that even though GSA reviews designs, the A/E is responsible for the quality control of its own work and is professionally liable for its design documents.

a. Concepts.

(1) Concepts are prepared for new construction and total space renovation projects (prospectus level). This design quality review focuses on drawings, sketches, narrative, and models that present basic design/development strategies and proposals regarding building massing, functional relationships, space allocations, schematic floor plan layout, esthetics (including interiors), office environment and technology, environmental/safety systems/ accessibility, urban design/planning/historic preservation (if appropriate), and concept cost analysis. Preliminary and final concepts should be reviewed primarily for compliance with established project objectives. Materials should also be reviewed for compliance with GSA criteria and codes even at this formative stage in order to set the design in the right direction and identify potential problems that may surface during design development.

(2) The Office of Real Property Development, PBS, will review preliminary concepts of designated major projects and/or projects of national significance coincident with regional review at the regional office. Final concepts will be presented to the Commissioner, PBS, and the Assistant Commissioner for Real Property Development, or their designee(s). A Public Advisory Panel may participate when convened by the Commissioner, PBS. The Administrator, GSA, other PBS officials with program responsibility, and representatives from the Office of Congressional Affairs will be invited. These presentations will normally be held in Central Office. Comments resulting from either preliminary or final presentations will be conveyed to the regional staff within 1 week. Presentations should focus on basic design/development issues, such as those discussed in (1), above.

(3) Regarding design/build projects, the Office of Real Property Development review of preliminary concepts should be scheduled prior to the regional approval or commitment to the final concept. Depending on the form of the design/build procurement strategy, this may occur during the design development phase of the project or during the source selection process, as part of the input in the technical evaluation. The presentation to the Commissioner, PBS, shall be scheduled shortly after the concept has been finalized. The project management plans will include these presentations.

b. Tentatives.

(1) Tentatives are prepared for new construction and total space renovation projects (prospectus level). This review culminates with the project directives meeting(s). Critical project decisions are made at this stage. It is important that all participants in the design review and approval process are in agreement with such decisions. If disagreements cannot be resolved, the project manager should make the final determinations.

(2) Materials and building systems are selected and sized, and the layout and appearance of the facility are finalized at this stage prior to the development of working drawings and specifications. The reviews should focus on the architectural features and the articulation of the design in elevation, plan, and section, life cycle engineering analyses of proposed structural, mechanical, and electrical systems, value management analysis, accessibility compliance, energy conservation features, life and firesafety design, security, materials maintenance, operational responsiveness and flexibility, compatibility with historic resources adjacent to the site, and any other design issues which require owner approval or decision-making, or verification of code compliance.

(3) Any commitments made with local governments in the community planning/prospectus development process may be covered by the National Environmental Policy Act and/or the National Historic Preservation Act. Facility Planning staffs are responsible for ensuring that designs are in compliance with such laws and other prior commitments.

c. Preliminary design. Preliminary designs are prepared in lieu of concepts and tentatives for smaller or less-complex repair and alteration projects (prospectus and nonprospectus level). Preliminary designs are normally set up in working drawing format to facilitate efficiency and continuity through design completion. As discussed in b, above, the plans should be reviewed as a basis for owner decision-making and approval, and for verification of criteria and code compliance. The degree or intensity of review must be appropriate to the complexity of the project to reasonably ensure such compliance.

d. Working drawings and specifications (in Government terms).

(1) These contract documents are prepared to explain and describe in detail the design to potential contractors. The review of working drawings should be accomplished with this purpose in mind. Most project decisions should have been made by this phase. The working drawings provide the construction details and the specifications provide the performance requirements of the materials. It is important that the A/E clearly demonstrate the constructability of its design in the working drawings. This should be verified by a constructability review.

(2) The working drawings phase can be separated into "percent of completion" steps as necessary. Again, the intensity and level of review must be appropriate to the complexity of the project to ensure that the owner's concerns are satisfied and that code requirements have been met. Earlier phases of working drawings and specifications review should concentrate on criteria and code issues. Final reviews should be more focused on the **completeness** and **coordination** of the package being prepared for public advertisement.

e. Final approval. The region shall not approve the final submittal of the design until after the appropriate design review officials have been assured that the final design documents have met GSA's criteria and applicable codes, and that the A/E's scope of services has been satisfactorily completed. GSA design review procedures have been formulated to provide a basis for the project manager to make such determinations and, most importantly, to ensure that as an owner, GSA will receive quality projects and design excellence.

4. Design/build review milestones. Regarding design/build procurements, it may be necessary to modify these milestones to accommodate variances in the procurement strategy for specific projects. The project management plans of such projects must describe the design review procedures and identify specific milestones when GSA design reviews are to be performed.

5. Record keeping and reporting.

a. The region shall establish a systematic and documented procedure for independent code review, design quality review, and constructability review; clearly identifying units with "signoffs" by design review officials, as appropriate.

b. The procedure shall include a followup method to ensure that review comments are incorporated, where appropriate.

c. The region is to maintain review records as part of the project files.

▼ Validation

Status: Final